

Input: 1 0 0

States: {A} {A, B} {A, B, C}

end of string  
and last set  
of states has  
an accepted state  
Accepted

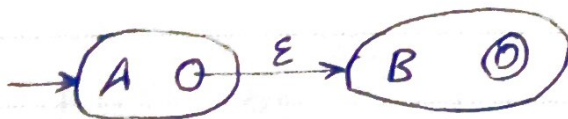
Input: 1 0 0 1

States: {A} {A, B} {A, B, C} {A}

end of string  
and last set  
has not an  
accepted state  
reject

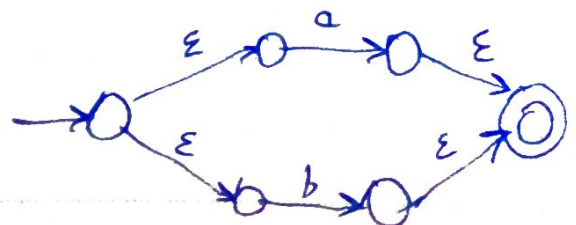
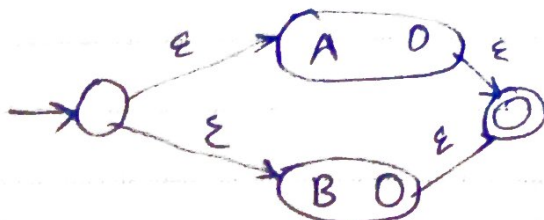
\_\_\_\_\_

AB

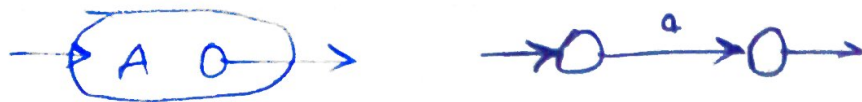
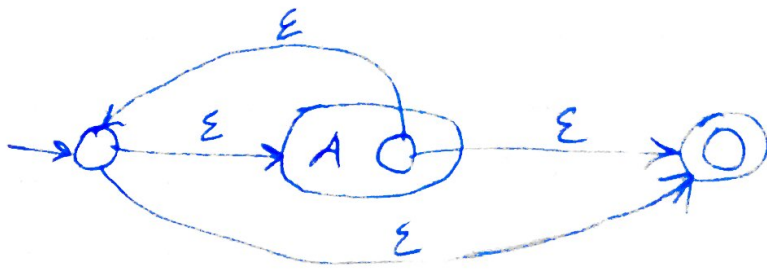


\_\_\_\_\_

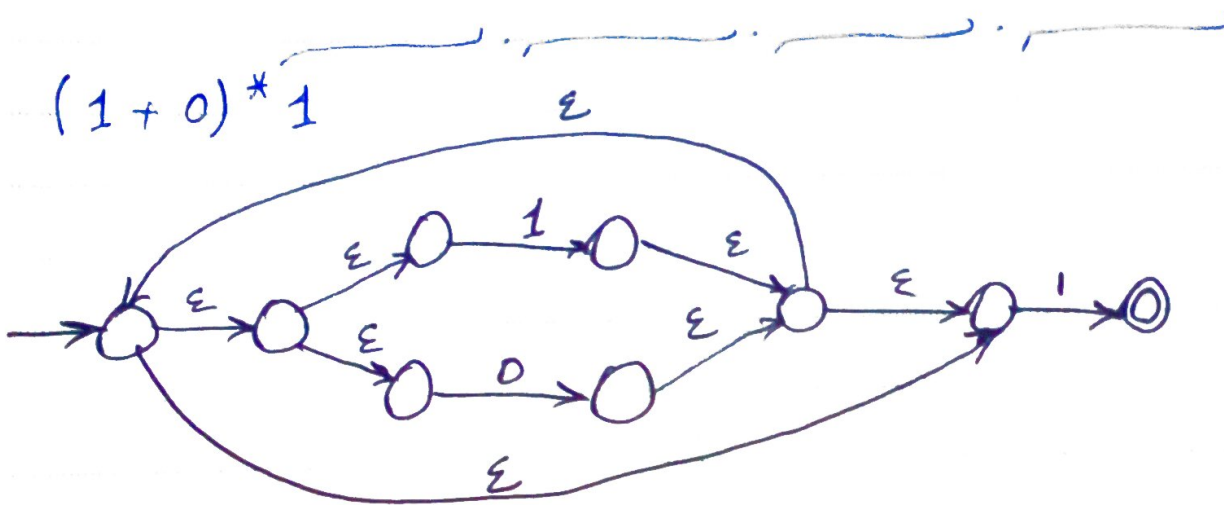
A+B



$A^*$



$(1+0)^* 1$



$\epsilon$  - Closure  $\{S\}$

State or states that can be reached from the start state

Slide 31

Input string

$\epsilon$  - closure  $\{B\} = \{B, C, D\}$

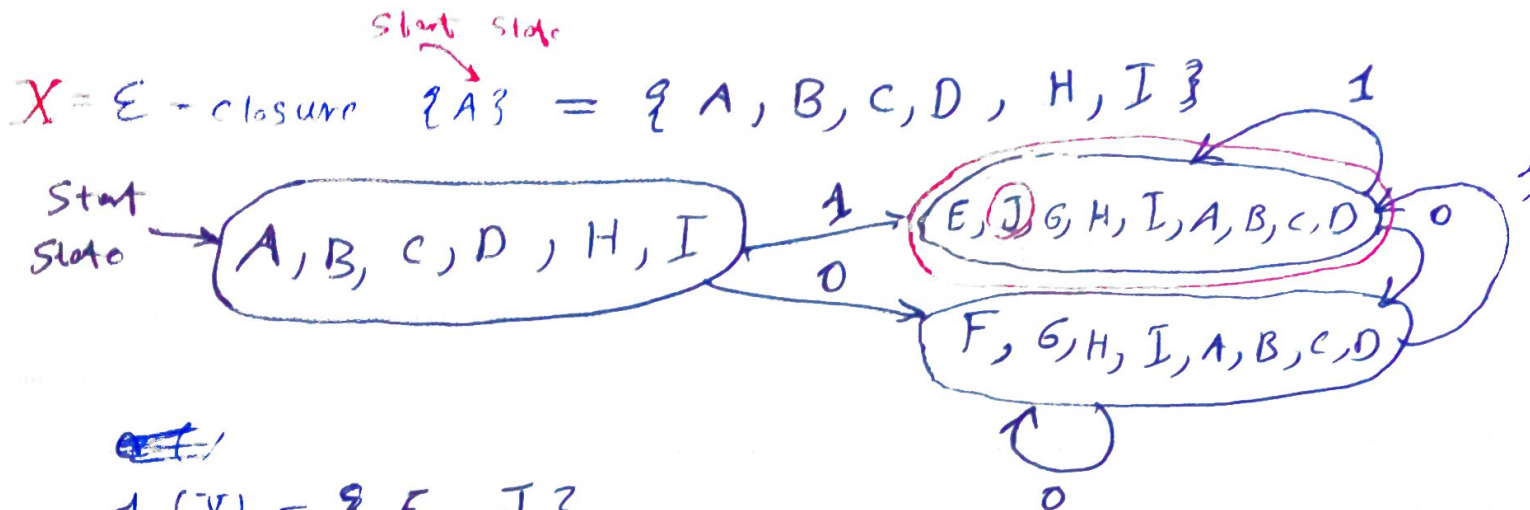
$\epsilon$  - closure  $\{G\} = \{G, H, I, A, B, C, D\} = X$

$a(X)$

Transition matrix

$= \{y \mid x \in X \text{ and } x \xrightarrow{a} y\} = Y \rightarrow \epsilon\text{-closure } \{Y\}$

Slide 31

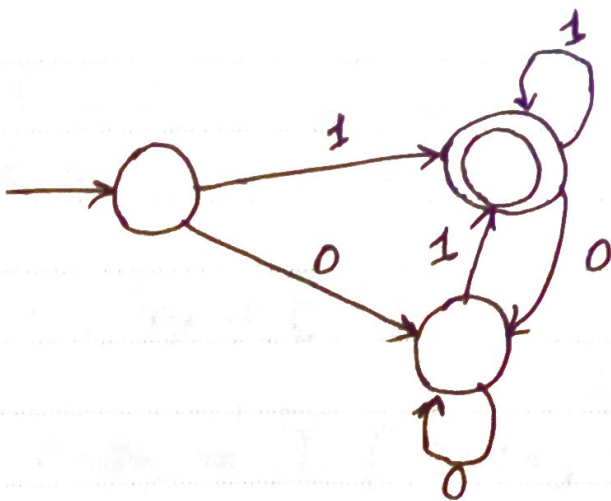


~~1(X)~~

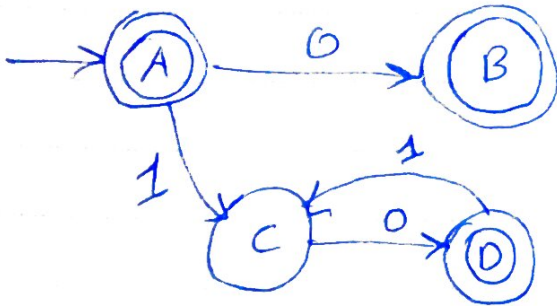
$$1(X) = \{E, J\}$$



$$\epsilon\text{-closure}\{E, J\} = \{E, J, G, H, I, A, B, C, D\}$$



$0 + \epsilon + (10)^*$



rows  
States

columns (input char)

	0	1
A	B	C
B		
C	D	
D		C

Slide 37

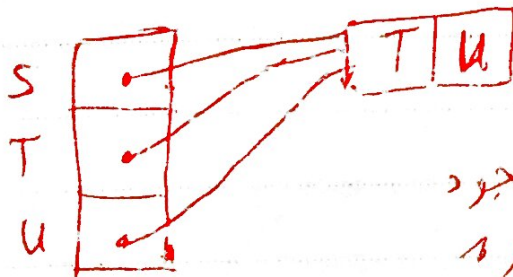
$i = 0;$  // index for input char

State = 0; // Index for states - start state

while (input[i])

{

State = T[State, input[i++]]



في حالة وجود  
صغرى مكررة